

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

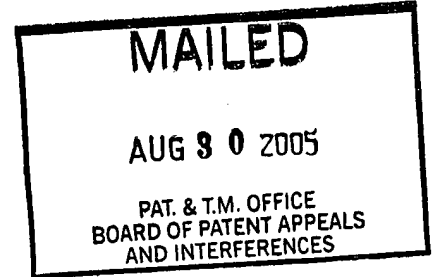
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte GIOVANNI CHIAVAROTTI, JEAN CONSTANT I  
and GIUSEPPE VONO

Appeal No. 2005-1054  
Application No. 09/707,885

ON BRIEF



Before GARRIS, TIMM, and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134, from the examiner's final rejection of claims 15, and 18-20, which are the remaining pending claims in this application.

A copy of these claims is set forth below:

15. An impermeable or substantially impermeable electrode suitable for use in a battery, which comprises a substrate with an impermeable or substantially impermeable conductive layer of graphite on the substrate.

18. A battery comprising, as a negative electrode, a substrate with an impermeable or substantially impermeable conductive layer of graphite on the substrate.

19. The battery according to claim 18, which is a graphite battery having a graphite block and a negative battery case, and wherein the substrate is a metal foil, both sides of the metal foil are covered with a layer of the graphite, and contact is established between the graphite block and the negative case.

20. The battery according to claim 18, which is a lithium battery having separators and a negative battery case, and wherein the substrate is a metal foil place between the separators and connected with the negative battery case.

The examiner relies upon the following reference as evidence of unpatentability:

Yamada et al.	5,723,232	Mar. 3, 1998
(Yamada)		

Claims 15 and 18-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yamada.

As a preliminary matter, we note that on pages 1-2 of the brief, appellants refer to U.S. Patent No. 6,428,842 (the patent that issued to a parent application), and also refer to a divisional application having Serial No. 10/164,570. This same divisional application is also mentioned on page 1 of the reply brief. This divisional application has since issued as U.S. Patent No. 6,717,796, on April 6, 2004.

We have carefully reviewed the examiner's answer, the appellants' brief and reply brief, and the evidence of record. Our determinations are set forth below.

#### OPINION

As an important matter, we note that the initial burden is on the examiner to set forth a prima facie case of anticipation. See In re Alton, 76 F.3d 1168, 1175, 37 USPQ2d 1578, 1583 (Fed. Cir. 1996); In re Oetiker, 977 F.2d 1443, 1444, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). We also note that when an examiner relies upon a theory of inherency, "the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination

that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (BPAI 1990).

Turning now to the issue at hand in the case before us, the issue is whether Yamada anticipates the claimed subject matter of "an impermeable or substantially impermeable conductive layer of graphite on the substrate".

On pages 5-8 of the brief, appellants explain how Yamada's process differs from their process of making the claimed electrode as set forth in the paragraph bridging pages 1-2 of the specification. Appellants explain that because the process for making the electrode and/or battery of Yamada differs from the process used by appellants in making their claimed electrode and/or battery, the examiner's theory of inherency fails.<sup>1</sup> Reply Brief, pages 1-3. In response, beginning on page 5 of the answer, the examiner states that "the methods are similar."

Hence, it is disputed whether the method in Yamada is the same as the method utilized by appellants in making the electrode. Our determinations with regard to this issue are set forth below.

We find that appellants' specification indicates that the process for producing the electrode for a battery involves immersing of a substrate into a suspension comprising graphite at a concentration between 1 and 50 g/l for a given length of time, for example, approximately 10 to 60 seconds. Thereafter, the substrate is dried at a temperature between 80 and 150°C for a given length of time, for example, approximately 1 minute and, after the

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<sup>1</sup> The examiner asserts that "as the methods are equivalent, the graphite layer of the prior art reference must also inherently be impermeable or substantially impermeable." See the bottom of page 3 of the answer.

drying step, that substrate is heat-treated at a temperature between approximately 200 and 450°C for a given length of time, for example, approximately 5 to 60 minutes. See page 2, first full paragraph, of appellants' specification.

In contrast, Yamada does not disclose the same temperature and time regimen. The examiner does not point to anywhere in Yamada where these same steps are disclosed. At best, beginning on page 5 of the answer, the examiner refers to comparative example 1 of Yamada, which states that drying is done at 60°C, and that heat-treatment is conducted at 240°C. No time specifications are provided.

However, this is not the same as drying at a temperature between 80 and 150°C, for a given length of time, for example, approximately 1 minute, followed by heat-treatment at a temperature between approximately 200 and 450°C, for a given length of time, for example, approximately 5 to 60 minutes, as set forth in appellants' specification, as discussed, supra.

Hence, the examiner's statement that the method in Yamada is equivalent to, or similar to, the method used by appellants, is incorrect. As such, the examiner has not met his burden for establishing a prima facie case of anticipation. That is, the examiner has not provided a factual basis to support the proposition that the electrode made according to the process of Yamada "necessarily" produces a substrate with an impermeable or substantially impermeable conductive layer of graphite on the substrate, in light of the fact that the examiner based such a conclusion on an incorrect fact (that the process of Yamada is equivalent to or similar to the process used by appellants). In this regard, we again emphasize that when

an examiner relies upon a theory of inherency, "the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d at 1464.

We note that appellants refer to U.S. Patent No. 6,428,842 (the issued patent of a parent application, mentioned, supra) as evidence that the process in Yamada differs from the process that appellants used in making the electrode or battery. Brief, page 4. However, we need not consider the prosecution history of this patent in making our determinations in this case.

In view of the above, we **reverse** the 35 U.S.C. § 102(b) rejection of claims 15 and 18-20 as being anticipated by Yamada.

**REVERSED**

BRADLEY R. GARRIS

BRADLEY R. GARRIS  
Administrative Patent Judge

Catherine Sun

CATHERINE TIMM  
Administrative Patent Judge

Ewenty A. Pawlikonesski

BEVERLY A. PAWLIKOWSKI  
Administrative Patent Judge

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